RJModem™

Embedded Modem

Benefits

- Complete integrated modem
- RJ-11 form factor
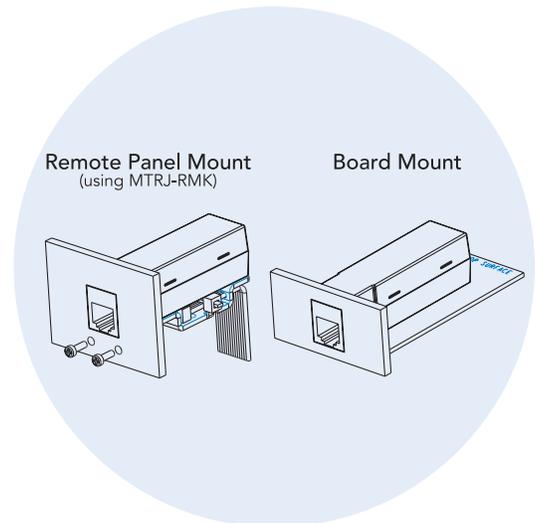- Global compliance
- Quick-to-market solution

The Multi-Tech RJModem™ embedded modem creates communication-ready devices by integrating modem functionality into the most compact, integrated device. The first-of-its-kind RJ-11 form factor includes the controller, data pump, DAA and RJ-11 connector providing device manufacturers with the ability to integrate dial-up connectivity into any product design. With minimal engineering effort, the RJModem embedded modem instantly adds global communication capabilities, enhancing the end-user experience and increasing product value.

Features

- Complete data modem including the controller, data pump, DAA and RJ-11 connector
- V.92/56K, V.34/33.6K, V.32bis/14.4K data rate options
- High speed models backward compatible with lower speeds
- Telecom approved in more than 50 countries (some pending)
- V.44 and V.42bis data compression
- V.42 error correction
- Intelligent DAA technology detects line status
- AT command compatible
- U.S. Caller ID reporting
- Low power/sleep mode
- FastPOS (V.29) and V.22bis Fast Connect
- V.80 Synchronous Access
- 3.3V or 5V power input options
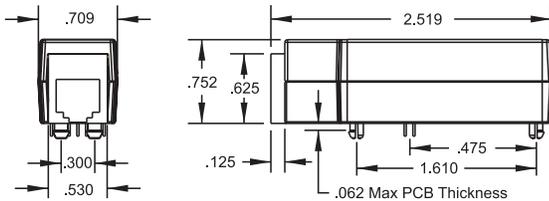- Board mount or remote panel mounting
- Two-year warranty

Remote Panel Mount
(using MTRJ-RMK)
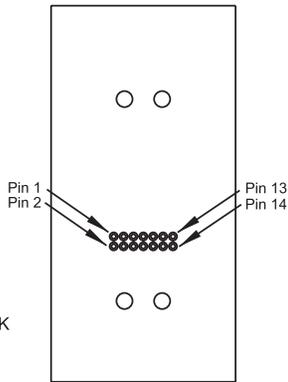
Board Mount

MultiTech® Systems

Highlights

Integration Provides Quickest Time-to-Market. The RJModem embedded modem offers the highest level of integration and the quickest time-to-market for embedded modem connectivity. In the space slightly greater than one that is normally consumed by a connector, the RJModem embedded modem integrates the controller, data pump, DAA and RJ-11 connector. This complete, ready-to-deploy modem instantly allows you to enhance your product while you focus on developing its core features.

RJModem Pin-out. The RJModem embedded modem interfaces easily with devices through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 115.2K bps and can be interfaced directly to a UART or microcontroller. The RJ-11 jack provides a direct connection to the public switched telephone network.

Pin 1 = Ring
Pin 2 = CD
Pin 3 = DTR
Pin 4 = Reset
Pin 5 = VCC In
Pin 6 = CTS
Pin 7 = RTS
Pin 8 = TDCLK
Pin 9 = TXD
Pin 10 = RXD
Pin 11 = External CLK
Pin 12 = GND
Pin 13 = Speaker
Pin 14 = RDCLK

Pin 1
Pin 2
Pin 13
Pin 14

Global Compliance. The RJModem embedded modem is in the process of international compliance testing (homologation) for global approval. This means one module can be specified per design without having to integrate specific country approved modules for each system used across the world. Contact your Multi-Tech sales representative for a current list of approvals.

Developer's Kit. The Developer's Kit provides the ability to plug in the modem and use it for testing, programming and evaluation. The kit includes one development board with RS-232 DB-25 connector, universal power supply, RS-232 cable, RJ-11 cable, MTRJ-RMK remote mounting kit, and Developer guide CD.

Specifications

Modem
ITU-T V.92/V.90/56K, V.34/33.6K, V.32bis/14.4K, V.22, V.23, & V.21; Bell 212A & Bell 103
V.42 LAPM, MNP 2-4 Error Correction
V.44, V.42bis, & MNP Class 5 data compression

Power Requirements
Typical: 66mA (.33W @5VDC)
Maximum: 75mA (.39W @ 5.25VDC)
Typical: 95mA (.31W @ 3.3VDC)
Maximum: 105mA (.38W @ 3.6VDC)

Physical Description
.709" w x 2.519" h x .752" d; .64 oz.
(1.8 cm x 6.4 cm x 1.92 cm; 0.02 Kg)

Operating Environment
Temperature Range: -40° to +85° C

Certifications
UL 60950-1, IEC60950-1, ACA TS001/AS3260, CCC
EMC: FCC CFR47 Part 15 (Class B); ICES-003 Canada (Class B); EN 55022 (Class B), EN 55024

Ordering Information

Product	Description	Region
MT5656RJ-92	V.92 Serial Data Only	Global
MT5656RJ-34	V.34 Serial Data Only	Global
MT5656RJ-32	V.32bis Serial Data Only	Global
MT5656RJ-L-92	V.92 Serial Data Only	Global
MT5656RJ-L-34	V.34 Serial Data Only	Global
MT5656RJ-L-32	V.32bis Serial Data Only	Global
MTRJ-DK	RJModem Developer Kit	Global
MTRJ-RMK	Panel Mounting Kit for RJModem	Global

Ordering Codes	Description
92	V.92/56K Data Rate
34	V.34/33.6K Data Rate
32	V.32bis/14.4K Data Rate
L	3.3V Power Input (default is 5V)

Made in Mounds View, MN, U.S.A.

Features and specifications are subject to change without notice.

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